

Solve each formula for the selected variable.

1) $C = 2\pi r$, r

2) $A = \pi r^2$, r

3) $d = rt$, t

4) $A = \frac{1}{2}h(b_1 + b_2)$, b_1

5) $P = C + rC$, r

6) $y = mx + b$, m

7) $v = \frac{d}{t}$, d

8) $a^2 + b^2 = c^2$, a

9) $A = s^2$, s

Use the percent proportion to solve.

10) 36 is what percent of 80?

11) 18.6 is 15.5% of what number?

12) What is 70% of 50?

13) 28 is 20% of what number?

Find the unit rate for each.

14) 366 miles in 22 hours

15) \$6.75 for 9 lbs

16) 42 fish in 60 gallons of water

17) 388 miles with 16 gallons of gas

Solve.

18) A beautician named Mexter Lierce usually earned 20% of the total bill as a tip. To earn \$60 in tips, what would his total service fees need to be?

19) Bayla Kurant wanted a pair of jeans that normally sells for \$75. One day Bayla discovered the jeans were on sale, 35% off. What is the sale price of the jeans Bayla so desperately wanted?

20) Grarcus Mimm was a professional wrestler. Being the extremely busy person that a professional wrestler is, Grarcus hired a personal assistant, Misten Krahan, to schedule all of his appointments and appearances. As is customary in the world of such celebrity, the personal assistant earned 20% of Grarcus's annual salary. If Grarcus Mimm earned \$2,042,500 in 2009, how much did he pay his personal assistant?